August 25, 1997

Supervisor Michael Yaki
San Francisco Board of Supervisors
401 Van Ness Avenue
San Francisco, CA 94102

RE: Sutro Tower Expansion

Dear Supervisor Yaki:

We write to express our concern and opposition to the proposed expansion of Sutro Tower. It should probably be torn down, not expanded. The materials sent by the Sutro Tower Company are outrageous. Basically, they say: "Sure, the radiation from the tower will go up following the expansion, but we think the new levels are still safe." Of course they don't know. As people living near the tower, we don't particularly want to be part of some science experiment. They also say, "The tower was built in the 1970s. Changing television technology now requires expansion." This logic is fatally flawed. A decision made more than 20 years ago should not be repeated and expanded just because it was made once. Do we learn nothing? Can we change nothing?

Not only are there very real public health concerns (let alone the effect of the tower on electric appliances such as stereos and telephones), there can be an adverse effect on property values to the extent that people believe the tower and its various forms of radiation may pose a health risk.

We have seen the San Francisco city government get agitated about the possibility of a Blockbuster Video coming to Ninth and Irving and potentially affecting the "character of the neighborhood." We have seen concern over the number of coffee bars in some neighborhoods. It would be nice to see a comparable level of concern about something of much greater public health and public policy concern--namely, Sutro Tower.

We oppose the expansion of Sutro Tower, and hope the Board of Supervisors and the planning commission will do the right thing and forbid it.

Yours truly,

Jeffrey Pfeffer

Kathleen F. Fowler

Hillary E. Gitelman
The Environmental Review Officer
Planning Department
1660 Mission Street, 5th floor
San Francisco, CA 94103-2414

Environmental Impact Report
Proposed Addition to Sutro Tower

4 September 1997

Dear Ms. Gitelman:

We understand that Sutro Tower, Inc. is planning to add a new 125-foot vertical support structure which will hang from one of the top crossbars of Sutro Tower. FOR THE RECORD, WE OPPOSE ANY EXPANSION OF SUTRO TOWER. The reasons for our opposition to the addition are as follows:

1. Our main area of concern is the potential for adverse health effects from radiofrequency radiation (RFR). During the time when both Digital Television (DTV) and National Television Systems Committee (NTSC) signals would be broadcast, RFR would increase above existing levels. We do not believe that the health effect isssue has been adequately addressed in the draft Environmental Impaact Report. There have been no published reports to our knowledge that explain the actual biological effects of RFR. How, then, can the report come to the conclusion that there would not be any adverse health effects from the proposed project?

2. We are concerned about the additional interference with telephones, radios, TV's, etc. which limit the use and enjoyment of our home. We presently experience considerable interference when we use our telephone. At times it is difficult to understand what people are saying. We have a stereo audio receiver which we are unable to use in the upstairs of our house without having rock music blasting in the background. I purchased an electronic kitchen scale last Christmas which works fine in the store but does not work in our home. We had a guest to our home complain that his car security system would not work. The increased levels of radio frequency radiation we will experience if this propsed expansion of Sutro Tower is approved will certainly not correct the problems we are experiencing, they will only make them worse.

We are distressed that Sutro Tower, Inc. did not see fit to notify us of their plans as we live only a block or two from the tower. We understand that there was public meeting on the project on 15 July 1997. Why weren't we notified of this meeting so that we might have been able to attend?

PLEASE ADD OUR NAMES TO THE LIST OF 'INTERESTED PARTIES' REGARDING ANY ISSUE PERTAINING TO SUTRO TOWER, INC.

Sincerely yours,

Wendell E. Gerken
Hilde L. Gerken

Wendell E. and Hilde L. Gerken
156 Marview Way
San Francisco, CA 94131-1220
(415) 826-2669

cc. Mr. Stephen X. Nahm, President
Midtown Terrace Homeowners Association
P.O. Box 31097
San Francisco, CA 94131

101 Villa Terrace
San Francisco, CA 94114

September 8, 1997

Ms. Hillary E. Gitelman
The Environmental Review Officer
Planning Department
1660 Mission Street, 5th Floor
San Francisco, CA 94103-2414

Re: **Sutro Tower Digital Television - Draft Environmental Impact Report**

Dear Ms. Gitelman:

I am writing to you as the current President of the Twin Peaks Improvement Association. I am also writing to you as a second-generation San Franciscan who was born and raised and has continued to live in the shadow of Mt. Sutro and Twin Peaks.

The current attempt by Sutro Tower to upgrade its facilities is almost a mirror image of the controversy which riled the neighborhood in the 1960s and early 1970s.

At that time, we were told that we had to accept the tower here, as Mt. San Bruno could not provide the height needed for line of sight transmissions to the majority of Bay Area television viewers. As I am sure you are already aware, the reason for the push by the FCC at that time was the desire to improve direct reception and as a result, increase the number of color televisions purchased by consumers. If they couldn't get good reception, they were certainly not going to upgrade to a new TV.

Now we are told that the Tower must upgrade to DTV and it must be up and running by October of 1998. This time, the broadcasters want to encourage the purchase of new TV sets to receive this new upgraded signal. The "mandated date", however, is not a result of an FCC mandate, rather it is a voluntary agreement between the major broadcasters and the FCC. The date has little to do with public service and a great deal to do with getting your product to market first.

Recently it was announced that ABC, the parent company of KGO, which owned the tower site in 1966, has disclosed they will probably forgo broadcasting HDTV altogether and instead compress a number of regular-definition programs and some pay-TV programs into the digital pipe. If ABC/KGO is considering something other than DTV, the over 150 pages based on the assumption that the ten panel antennae will be broadcasting only HDTV are incorrect and must be redone with more complete data.

NTSC or analog transmissions operate on a line of sight basis. DTV, however, does not. The necessity for such a tall tower no longer exists. Even Sutro Tower admits that a lower elevation is acceptable, as its current plan calls for antennae which begin at 200 feet **below** the top of the current tower.

Representations made by Sutro Tower in its general information sheet issued to the public that DTV cannot be placed on San Bruno are incorrect. The EIR states in its "Off-Site Alternatives" section (pages 1-7 through 1-9) that DTV can be placed on Mt. San Bruno. The main objection by Sutro Tower appears to be the potential loss of revenue if they do not place DTV at their site.

Unlike the situations in 1966 and 1971, the community now has experienced over twenty-one (21) plus years of real, verifiable effects from the existence of this tower in a heavily populated residential area of single family homes. The EIR states that this is a "low density" residential area. This is an incorrect characterization of the area, and would lead the uninformed reader to assume that this was an area of few homes on large lots, similar to a suburban landscape. I need not remind anyone in the Planning Department that San Francisco, by virtue of its 49 square mile limit, has no area that could be reasonably called "low-density", even if it is zoned RH1. The area surrounding Sutro Tower has one of the most stable populations in all of San Francisco. There is very little turnover, and residents rarely move when they retire, or when their children leave home. As a result, we have a very long collective memory.

Many of the residents have kept files on their dealings with the tower over the years. The current sentiment is that Sutro Tower is not a "good neighbor". Not that they haven't made attempts over the years to mitigate problems; however, it is simply not in the nature of a 977 foot tall radio and television broadcast tower located in an urban residential area to be a "good neighbor" and continue to operate a successful business. The sandblasting, painting, guy wire repairs, "moaning" noises during windy days, and regular interference with everything from telephones to car alarms is a constant reminder that Sutro Tower is a neighbor.

As a result of my perusal of the Sutro Tower Digital Television draft Environmental Impact Report, I would like to see the following issues addressed:

Exactly who is Sutro Tower, Inc? Are the parent companies of Sutro Tower, Inc. fully liable for any eventuality concerning the tower?

Is Sutro Tower, Inc. fully insured against catastrophic risks? How much insurance does the corporation have? Is it required to carry insurance? It is covered by a reinsurance company in case of a catastrophic failure?

Who regulates the building codes for Sutro Tower, Inc.? Are broadcast towers covered under the 1997 Uniform Building Code? If so, is Sutro Tower up to date? If

not, why not? Is the broadcast tower industry self-regulating? Under what guidelines are maintenance schedules kept?

Do other comparable broadcast towers of similar weight and design exist?

If so, are any located in major urban areas?

Are any located in active seismic zones?

Who regulates security for broadcast towers? Is a regular risk-assessment analysis taken by the industry? Are Sutro Tower's security procedures up to date?

With the increased seismic activity in California, Washington and even Japan, and with the odd weather patterns we have experienced in the last 15 to 20 years, it is time that the Planning Department and the broadcast industry itself consider whether a major broadcast tower should be located at Mt. Sutro. Remember the Bay Bridge in 1989? No one ever expected it to fall...and as the result of a previously unknown fault.

The current DTV project would be an ideal time to begin to phase out Sutro Tower. The old technology on the tower has served the Bay Area well, but at a very high price to its neighbors. I urge you to move DTV to San Bruno and phase out the current Sutro location.

Sincerely yours,

Nancy C. Hogan

Everett R. Holmboe
129 Marview Way
San Francisco, CA 94131-1219

Telephone 415 826 - 6378 Fax 415 826 - 6138
email erhinsf@aol.com

September 4, 1997

Hillary E. Getelman
The Environmental Review Officer
Planning Department
1660 Mission Street, 5th Floor
San Francisco, CA 94103-2414

Re: SUTRO TOWER
DIGITAL TELEVISION

Dear Ms. Getelman,

I am writing to express my concerns regarding the proposed addition of multiple digital television transmission antennas to the Sutro Tower mast here in San Francisco. I am a resident of the Midtown Terrace district and live in the shadow of the tower.

I recently learned of plans to considerably increase the broadcast radio frequency radiation being emitted from the tower, by introducing additional structural elements and antennas. The plan also calls for a considerable increase in power usage and dissipation at the sight. In an effort to understand the proposal I acquired a copy of the City and County of San Francisco Sutro Tower Digital Television (DTV) - Draft Environmental Impact Report. I have studied the draft report and found that it does not address a number of serious concerns I have regarding the environmental impact to my neighborhood and our city.

Yesterday I had the opportunity to attend a community meeting along with two hundred fifty to three hundred other interested citizens. Many of these people present expressed concerns about the same issues I am addressing, as well as other issues that may effect their well being.

During the course of the meeting a number of specific topics and questions were raised relating to the expansion into digital service.

- Earthquake Safety

  Has the additional weight and wind loading surface effects been adequately investigated vis-à-vis possible structural failure. Has the "fall zone" and possible environmental impact of rupture of reservoirs in the area been addressed? Are these contingencies addressed by the San Francisco Disaster Emergency Response Plan?

- Epidemiological Survey

  Have any studies been done that specifically address concerns regarding present or proposed increased levels of RFR at the frequencies and modulation patterns being proposed for the sight. Several attendees commented on the disparity between the studies sighted in the draft report and the actual frequencies and modulation methods being proposed. The RFR impact studies in the EIR are not on point in that they investigate frequencies that are orders of magnitude different than those we are exposed to. The vast majority of these studies address acute exposure, rather than chronic exposure, at various exposure levels that we are experiencing in the vicinity of Sutro Tower. In point of fact the Draft EIR states:

  "most experimental data that indicate the existence of thresholds were obtained by the use of single or repetitive exposures of relatively short durations and/or time periods."

  What are the possible long term carcinogenic, mutagenic, and teratogenic effects of these combinations? Are they adequately predicted by studies of other frequencies and modulation methods? Have PEL, TLV, STEL studies been conducted that reflect the exposures being planned?

  I live on Marview Way, essentially an equal distance from Sutro Tower and the additional radio masts and transmission sights located on the north peak of Twin Peaks. I am caught in a "cross-fire" between the two radiation locuses. I did not see anywhere in the Draft EIR any discussion on the possible cumulative and/or synergistic effects I might expect by receiving the combined radiation from two strong RFR sources in fairly close proximity to my home. I do not believe that the constructive and destructive interference resonances of these multiple sources is fully understood or analyzed, and the physiological effects of exposure to these fluctuating RF fields is not entirely quantifiable.

- Increased "Electronic Noise"

  What can we, as residents of the area, expect in further degradation of our quality of life caused by a significant increase in the level of RFR emissions. The new transmissions being planned will include from ten to sixty additional radio frequency carriers, all with the possibility of interfering with existing RF sensitive equipment. Many of the residents of the district recounted ongoing problems with all manner of electronic devices.

- Increased "Electronic Noise" - Continued...

  Will our quality of life be even further diminished by increased interference with common electronic instruments and devices? We are currently denied "normal" usage of telephones, televisions, audio and video recorders and play back equipment, garage door openers, and automobile alarms. What are the potential hazards of induced arrhythmia, bradycardia or tachycardia to those members of our population that require a heart pacemaker of monitor?

- Failure to Address Long Term - Key Environmental Issues - Impacting Our Neighborhood and/or Potential Alternate Sites.

  Conflicts with adopted environmental plans and community goals.
  Inadequate examination and treatment of alternative site proposals - specifically Mount San Bruno, Mount Tamalpais, Mount Diablo, or other alternatives. The draft EIR also contains factual inaccuracies and omissions regarding FCC deadlines and schedules.

In view of the above concerns and open questions, it would seem prudent to reevaluate the advisability of introducing a significant source of additional radio frequency radiation to the heart of our urban environment. Sutro Tower should not be a test bed or laboratory to evaluate the possible deleterious effects of a significant increase in RF energy radiating into our environment. Especially considering that there are excellent alternate locations available that do not have potential sensitive receptors abutting the immediate perimeter of the transmitter facility.

The proposal to add DTV transmission antennas to Sutro Tower has brought to light a number of environmental considerations relating to the existing facility and structure. We have been given an opportunity to reevaluate the necessity and desirability of a project that was built prior to our present level of sensitivity to, and awareness of, environmental issues. It is probable that if the existing structure had not been constructed, it would never be allowed to be built at its current location.

Sutro Tower is an unmitigated environmental disaster. We are being given an opportunity to redress, rather than perpetuate, the excesses of the go-go sixties that allowed abominations like the Embarcadero freeway and Sutro Tower to be built.

Many of the people attending the community meeting recounted numerous negative environmental impacts on their day to day lives. A number of people also expressed a high level of anxiety regarding potential dangers inherent in having Sutro Tower in the heart of an urban area. Many of these concerns will be exacerbated by the addition of DTV transmitters and antennas / ancillary structures to the tower. These existing environmental disasters and concerns for potential danger include:

- Existing Radio Frequencies Interference

  This currently exists at a level that precludes day to day enjoyment and usage of common electronic devices.

- Foreign Object Damage Below the Structure.

  Objects and debris have fallen off / been blown off the tower on a number of occasions and have been found on city streets and residential areas adjacent to the perimeter of the structure.

- Possible Hazard of Collapse Due to Earthquake or Terrorist Activities.

  There is a very real potential for injury to population and damage to residences and personal property in the area. The base of the structure is easily approached on foot and very difficult to secure from possible terrorist attack. The height of the tower is such that a number of private homes and public facilities, including reservoirs, are at risk in the event of a collapse. The initial design load engineering called for only 50 mile per hour wind pressures. We have witnessed collapse of other structure built to 1960s design specifications, ie; the Bay Bridge and the Cypress Structure.

- Exposure to Hazardous and Carcinogenic Substances.

  In 1992 an extensive maintenance project exposed a wide radius of the surrounding community to known carcinogens; silica (sand), lead (paint particles) and other chemicals utilized in a major cleaning and painting project. After only twenty years the facility had considerable rust and corrosion damage that necessitated grinding and sand blasting as well as subsequent repainting. These activities exposed many people to unhealthy levels of toxic and hazardous materials. This action will undoubtedly need to be repeated a number of times in the next century.

- Hazard to Aircraft

  The top of Sutro Tower raises to a height of over 1800 feet above sea level. This is almost twice the height of the highest natural land form in San Francisco. Twin Peaks rise to 904 feet and 920 feet, exceeded only by Mount Davidson at 927 feet. The entire tower is often shrouded in fog and the potential danger to aircraft has necessitated expansion of the strobe light arrays in an effort to mitigate this danger. The possible alternate site on Mount San Bruno would allow lower antenna structures, present less of a hazard to aircraft, and virtually eliminate the possibility of injury to persons, or destruction of property on the ground, in the event of an accident. Any aircraft collision with Sutro Tower presents a significant risk of injury or death to the general populace in the vicinity of the tower.

One of the most frightening hazards that came to light during the community meeting on September 3, 1997 is the existence of documented "hot spots" in the vicinity of the tower. One of the people present at the meeting recounted an incident whereby a metal warning sign attached to a perimeter fence became thermally hot enough to bubble the paint on its surface. The sign was thermally hot enough to present a contact hazard to anyone touching it. This incident was confirmed by another person attending the meeting, Mr. Richard Lee of the San Francisco Public Health Department. The hazard was serious enough to necessitate removal of the metal sign in favor of a wooden sign that would not develop eddy currents and exhibit thermal heating. This incident demonstrates the interaction of environmental factors or radiation sources in an unpredictable manner that was not anticipated.

The possible acute and chronic health effects of these unpredictable occurrences would definitely incline me to lean toward a very conservative approach to adding additional high power energy sources to my immediate environment. What is the effect of induced localized hyperthermia resulting from metal plates, pins, fillings, or prosthetic devices implanted in the bodies of some members of our population. I have had extensive metallic hardware implanted in my tibia and fibia as a result of an accident. I am concerned as to the acute or chronic effects of localized hyperthermia occasioned by their interaction with extensive fluctuating RF fields in my environment.

We, in this country, and on this planet, are witness to many many disastrous environmental legacies that in their day did not pose a recognized or regulated potential for hazard. The rust belt in the mid west and extensive "brown field" acreage in inner cities of the east coast bear witness to the unwitting damage that has been wrecked upon our living spaces. We have a golden opportunity to set right and reverse a potentially long term environmental hazard that is our legacy of the sixties.

Sutro Tower is a project constructed at a time when NTSC broadcast signals was the preferred method of propagation of television programming. Over the past twenty five years technologies have changed and the market necessity for such a tower is now very much in question. Currently fully two thirds of the populace receives television via cable. For the remaining one third of the population DTV signals broadcast form an alternate site would be equally effective in providing service that would be comparable to that provided by allowing Sutro Tower to engage in increased RFR emissions.

I understand that essentially no human endeavor is without risk, and that part of our existence is a risk / benefit analysis with regard to environmental hazards and safety for our general population. The Draft EIR states:

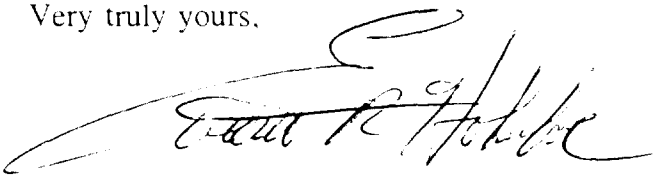
> *"In the specific case of RFR from the proposed Sutro Tower Digital TV broadcasting, there are no studies involving precisely this technology nor is there an extensive body of evidence from studies of exposure to the general population from broadcast towers."*

In this case alternate sites clearly would achieve the stated goal of delivery of digital television to this market area, with a considerable reduction in current and potential risk to the general population impacted by Sutro Tower.

At the very least, I feel it is prudent and necessary to request additional studies, gather more information, and request additional time to review alternatives to adding digital TV to Sutro Tower.

A decision to stop the plan to install DTV transmitters and antennas would have two fold benefits. It would be a proactive decision to obviate known environmental degradation as well as potential disastrous health effects occasioned by poorly understood interactions of untested technologies. A secondary, and perhaps more important benefit, would be the removal of an existing proven environmental hazard by rendering it obsolete. What an opportunity! Seize the day!

Very truly yours,



Everett R. Holmboe

CC: Mr. Steve Nahm
President
Midtown Terrace Home Owners Association

Senator Quentin L. Kopp
California State Senate District 8

Everett R. Holmboe
129 Marview Way
San Francisco, CA 94131-1219

Telephone 415 826 - 6378 Fax 415 826 - 6138
email erhinsf@aol.com

September 10, 1997

Hillary E. Getelman
The Environmental Review Officer
Planning Department
1660 Mission Street, 5th Floor
San Francisco, CA 94103-2414

Re: SUTRO TOWER
DIGITAL TELEVISION

Dear Ms. Getelman,

This is a follow up letter to my letter of September 4, 1997. I realize that today is the last day to comment on the Draft EIR and there are several additional points that have come to mind since my last correspondence.

At the community meeting of Wednesday September 3, 1997 Mr. Eugene Zastrow, Vice President and General Manager of Sutro Tower Inc., addressed the meeting with regard to concerns regarding increased exposure to RFR should the project move forward. In his comments he remarked the part of the redesign of the tower includes moving several FM radio transmission antennas fifteen to twenty feet higher on the tower. Mr. Zastrow stated that due to the inverse square law of energy propagation, there would be a small reduction in RFR energies from these few antennas, that could be measured at ground level, and at sensitive receptor sites beyond the perimeter of the installation.

Upon study of Mr. Zastrow's comments I again reviewed the Draft EIR and found that there is no discussion of the impact of increasing the power output by a factor of ten for three stations, from 100 kw to 1,000 kw each, and more than doubling the combined output of the remaining VHF stations, while lowering the antenna location by several hundred feet. If Mr. Zastrow's remarks, based on the inverse square law of propagation, regarding raising the position of a couple of FM radio antenna would lower the RFR emissions at ground level, would not the same laws of physics lead to an increase in RFR energies at ground level due to a substantially lower position of the new antennas on the tower?

Mr. Zastrow further stated that the FCC bases many of their studies on a magic number of 1 kilometer from the source. In point of fact, we have a situation where residences and potential sensitive receptor sites are at one tenth the distance from the base of the tower. I would presume that the information presented in the Draft EIR is predicated on the height of the tower being factored into the distance from public exposure. If that is the case the new location proposed for DTV antennas is considerably less distant than top of the tower where the existing antennas are located.

The Draft EIR also fails to address the difference in height between the primary broadcast antennas at higher than above 900 feet above ground level, and the secondary antennas located at less than 200 feet above ground level. If these standby antennas are operating at the same power level as the primary antennas the RFR exposure for residences adjacent to the site is quadrupled! Does this four time increase in energy density move the populace from a risk factor of 12% to a risk factor of 48% of the FCC mandated safe levels?

One other topic not fully explored in the Draft EIR is the impact on structural integrity of the tower due to increased load and wind resistance. The Draft EIR does not stipulate the potential fall zone around Sutro Tower. The fall zone varies with elevation from 297 Meters (976 feet) to 280 Meters (921 feet), from the center of the base of the tower. The potential fall zone includes properties on the following residential and community access streets:

Palo Alto Ave.	St. Germain Ave.
Gleenbrook	Farview Ct
Marview Way	Clearview Ct.
Panorama Dr.	Greenview Ct.
Dellbrook Ave.	Forrest Knolls Dr.
Oak Park Dr.	Woodhaven Ct.
Crestmont Dr.	La Avanzada
Clarendon	

How is this potential hazard addressed by the San Francisco Emergency Response Plan?

All of these issues become moot if the project simply moves to a less urban site. The closest possible sensitive receptor site from existing antennas on San Bruno Mountain is over 1 kilometer, tens times the safety zone available to Sutro Tower!

Very truly yours,

Everett R. Holmboe

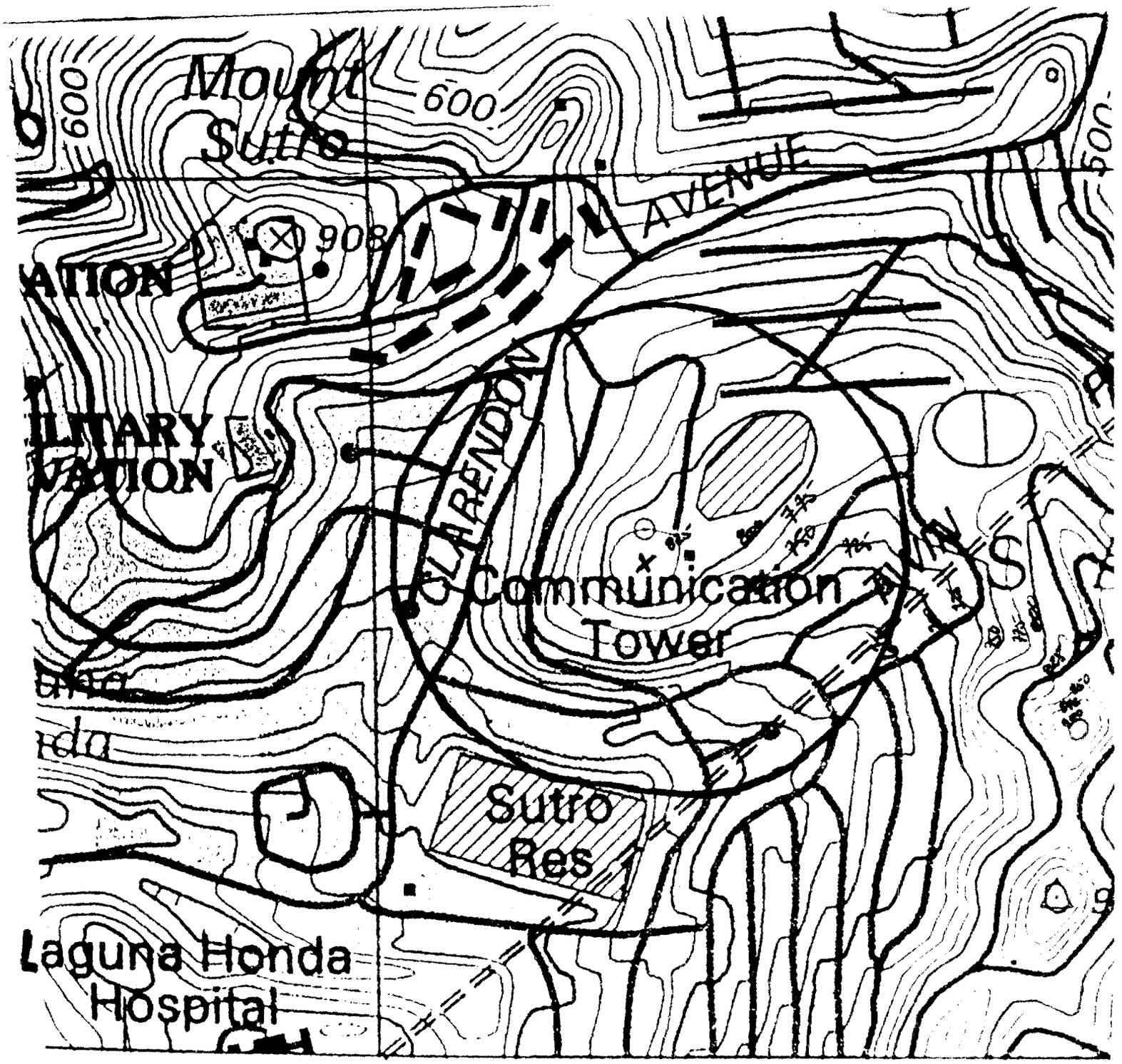
Encl: Fall Zone Map and Table of Elevations

CC: Mr. Steve Nahm
President
Midtown Terrace Home Owners Association

Senator Quentin L. Kopp
California State Senate District 8

Sutro Tower Fall Zone Analysis
September 10, 1997

Distance From Base in Meters	Distance From Base in Feet	Drop Elevation in Feet	Height Tower in feet	Elevation At Impact Point
298	977	25	977	809
297	976	50	977	784
297	974	75	977	759
296	972	100	977	734
295	969	125	977	709
294	965	150	977	684
293	961	175	977	659
291	956	200	977	634
290	951	225	977	609
288	944	250	977	584
286	937	275	977	559
283	930	300	977	534
281	921	325	977	509



7'30" R 5W

TOWER 977' ≃ 297.8 meters

Deep In Elevation ~ 325'

1' = .304800 Meter

Fall Zone Varies with the elevation from
976.68' 297 m
921' 280 m

1 .5

1000

1 5

Hillary E. Gitelman

ENVIRONMENTAL REVIEW OFFICIER

RE: SUTRO TOWER EXPANSION

DEAR HILLARY,

I am writing you today to oppose the expansion of the Sutro Tower and its capacity to emit an increased level of radio frequency radiation. I am the father of two girls, Mia age 11 and Samantha age 6, and I will not allow them to be exposed to any more radiation, especially for the benefit of broadcasting digital and analog T.V. This neighborhood has been unfairly subjected to an inordinate amount of radiation from a Tower which never should have been erected here in this community. The health affects, I am sure, have been devastating with cancer and leukemia visiting this community beyond the norm. We also have had to endure radio and telephone interference, garage door openers activating as well as car and house alarms. This TOWER should be shutdown and moved to a more remote site such as SAN BRUNO MT. DO NOT ALLOW THIS TRAGEDY TO OUR COMMUNITY TO CONTINUE. NO, NO, NO TO THIS DEATH SENTENCE

Sincerely,

Greg James

9 AQUALUSA SF 94131

Ernest Kohn
497 Dellbrook Avenue
San Francisco, CA 94131

COPY

June 13, 1997

Ms. Susan Lowenberg, President
San Francisco Planning Commission
1660 Mission Street
San Francisco, CA 94103-2414

Re : Sutro Tower, Case No. 97.357 D
Building Permit Application No. 9708664

Dear Ms. Lowenberg :

Thanks to Mr. Maltzer of the Planning Department per his memo dated June 6, 1997 and enclosed therewith Notice of Hearing it has come to my attention that on June 19, 1997 the matter of the subject application will come before your Commission . As a homeowner residing since 1966 at the above address which is located less than 500 feet westerly of Sutro Tower I respectfully request you to then take into consideration and address the following :

1. In the letter dated May 9, 1997 of Ms. D. Stein of GCA to Ms. H. Gitelman of the Planning Department - a letter which was adopted by the Department as, or part of, the Categorical Exemption - it is stated (page 1) that "... after decades of exposure and corrosion , the Tower is no longer at peak structural integrity and seismic safety." , and again (page 2) "... improvements are required to restore the deteriorated structure to meet current safety standards, ..." .

2. The San Francisco Bay Bridge and the Golden Gate Bridge, both over 60 years old and located in a substantially more corrosive environment than Sutro Tower, appear not to have required any corrosion - offsetting structural strengthening . Evidently, that need was obviated, or minmized, by constant rigorous rust-inhibiting maintenance.

3. In his letter to "Dear Neighbor" dated September 24, 1992 , Mr. Eugene Zastrow, General Manager of Sutro Tower Inc. mentioned

that, during the first nearly twenty years of the Tower's existence there has "...never been an overall corrosion removal and repainting project,..." .

4. Several hundred people live within a 977-foot radius of the Tower .

5. Is it a function of the San Francisco Planning Department, or any other City agency - and if it is not, shouldn't it be ? - to monitor, on a continuous basis :
   a) the residual structural integrity of Sutro Tower and its conformance with applicable safety standards as to wind loads and concurrent seismic acceleration ; and
   b) an effective and continual corrosion-inhibiting maintenance program established and implemented by the management of Sutro Tower Inc. ?

Let me assure you of my appreciation for your giving attention to this matter.

Sincerely

Ernest Kohn

cc: The Honorable Quentin L. Kopp, Senator, Eighth District, California Legislature

Mr. Eugene S. Zastrow, Vice President and General Manager, Sutro Tower Inc.

Mr. Stephen X. Nahm, President, Midtown Terrace Homeowners Assn.

COPY

Ernest Kohn
497 Dellbrook Avenue
San Francisco, CA 94131

September 7, 1997

Ms. Susan Lowenberg, President
San Francisco Planning Commission
c/o Ms. Hillery E. Gitelman
The Environmental Review Officer
1660 Mission Street
San Francisco, CA 94103-2414

Subject: Supplementary Comments to :
Sutro Tower
Digital Television (DTV)
Draft
Environmental Impact Report

Dear Ms. Lowenberg and Commissioners :

Please regard the following as supplementary to my comments of August 25, 1997 .

1. The DEIR being focussed on potential health hazards due to RFR , my comments addressed the inadequacy of the material presented to support the assertion that Sutro Tower RFR levels do not and would not exceed the FCC Guidelines 96 allowable maximum . My comments further suggested detailed and comprehensive measurements to correct that inadequacy. In the absence of such measurements, and in deference to your judgement whether to concur - with or without qualifications - with the Public Health Department's quoted opinion that exposure below the FCC Guidelines 96 level "... would not be harmful to human health.", I refrained from advocating either approval or disapproval of the project .

2. At the September 3, 1997 informational meeting here in Midtown Terrace, sponsored by two neighborhood associations, the sentiments expressed by many local residents re-emphasized our concerns not only with the health issue, but also with these other impacts :
   a) risk of collapse of the tower due to earthquake, settlement, structural corrosion etc.;
   b) visual intrusion on the neighborhood character ;
   c) reduction of property values;
   d) sandblasting debris, paint, falling objects;
   e) wind noise;
   f) interference with telephone, radio, TV, etc .

   My uncommitted stance re approval/disapproval of the project within the context of the as yet to be corroborated issue of exposure levels does not apply to these other impacts . These constitute either potential safety hazards, or constant impingements on one's peace of mind , or periodic damages or nuisances. Approval of the

project would not only aggravate these impositions - be it only marginally - but it would also, more importantly, place the Planning Commission's and Department's imprimatur on their perpetuation . On these grounds, I respectfully urge you to disapprove the project .

3. In 1988, in the absence of a DEIR, but in "... an aura of doubt and uncertainty as to the safety of exposure to electromagnetic radiation..." (Resolution 11399) the then Planning Commission adopted a motion of intent to disapprove the application for the addition of two antennas to Sutro Tower . The applicant then withdrew the application which left the Commission " ... without a vehicle for a written expression of its concern over this matter ".

   It appears likely that the absence of such an expression may have aggravated the "aura of doubt", and, worse, contributed to the perception, in the minds of many a local homeowner - occupant or prospective - that this kind of RFR does indeed constitute a serious health risk .

4. If adequate documentation presented in the Final EIR supports the argument that the project could be approved because RFR exposure levels were found and expected to be within the range considered to be "safe" as to human physical health effects . . .

   . . . but if the project is disapproved on the grounds that approval would implicitely sanction the perpetuation of other impacts - namely some or all of those listed under item 2., above - impacts which are , or have the potential to be " ...detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity" (Code Section 303) . . .

   . . . then , in order to minimize the counterproductive psychological impacts of the kind which may have resulted as a side effect of the 1988 ".... absence of expression ..." , I would respectfully urge you to state for the record - and for press release - the factors which were, and those which were not , the bases for the disapproval.

Again, thank you for your efforts and consideration given.

Sincerely yours

Ernest Kohn

cc : The Honorable Quentin L. Kopp, Senator, Eighth District
California Legislature

Mr. Stephen X. Nahm, President, Midtown Terrace Homeowners Assn.

Ms. Doris Linnenbach , Twin Peaks Improvement Association

Ernest Kohn
497 Dellbrook Avenue
San Francisco, CA 94131

September 26, 1997

The Honorable Quentin L. Kopp
Senator, Eighth District
California Legislature
2171 Junipero Serra Blvd.
Suite 530
Daly City, CA 94014

Re : Sutro Tower DTV

Dear Senator Kopp :

Thank you for your letter of September 10, 1997, and especially for the prospect of your lending support to the opposition to the addition of antennas for DTV on Sutro Tower. I - for one - will greatly appreciate it if you could use the means of your office to that purpose.

About two hundred local residents participated in the September 3, 1997 informational neighborhood meeting (see enclosed copy of an article in The Independent of September 9) which was sponsored jointly by the Midtown Terrace Homeowners Association (MTHOA) and the Twin Peaks Improvement Association (TPIA) .

Many of the attendees voiced their concerns regarding the tower, and a petition form (copy of blank is enclosed) listing the plethora of impositions was used - at and after the meeting - by them and other neighbors to enumerate their concerns . It is my understanding that several hundreds of signed forms were delivered by the associations to the San Francisco Planning Department .

The MTHOA and TPIA Boards are now engaged in a joint effort to ensure that DTV antennas are not added to Sutro Tower . I have mentioned the tenor of your letter to Mr. Stephen Nahm, President of MTHOA . Although I cannot speak for the Boards of Directors of the two associations nor for the actively interested hundreds of residents in this vicinity , I just cannot but feel that most - if not all - of them would also welcome your support .

Thank you for your interest of many years standing in this matter.

Sincerely yours

Ernest Kohn

Encl.

cc : Mr. Stephen X. Nahm , President, MTHOA
Mrs. Doris Linnenbach , TPIA

Ernest Kohn
497 Dellbrook Avenue
San Francisco, CA 94131

COPY

October 26, 1997

Mitchell Katz, M.D.
Acting Director
San Francisco Department of Public Health
Room 306
101 Grove Street
San Francisco, CA 94102

Sutro Tower Digital Television (DTV)
Draft Environmental Impact Report (DEIR)
DTV Radiofrequency Radiation (DTV RFR)
Potential Health Hazards

Dear Dr. Katz :

I live about 300' from Sutro Tower . Like hundreds of my neighbors, I am concerned about potentially detrimental health effects due to RFR from the proposed DTV transmissions from that tower.

Press reports (September 16 - October 14, 1997 issue of The City Voice) have brought to the public's attention certain new details regarding the involvement of your department in the preparation of the DEIR , in particular your selection " under pressure " of Dr. C.K. Chou as Peer Reviewer of the Polson-Heynick Biological Effects report (Appendix B of the DEIR) .

As the DEIR does not include a statement of opinion by Dr. Chou - he is only named as peer reviewer on the title page of the rather complex 104-page report - it appears that this expert agreed in toto with the evaluations, opinions and conclusions of the other two experts .

Similarly (see statements on pages 1-4 and 3-14 of the DEIR) your department concurred with one of the critical conclusions of the Appendix B report - and did not disagree with any parts of that report nor present any comments or reservations . That gives rise to doubts as to the extent and detail of your department's review of that report .

Therefore, I submit the following points for your consideration - or re-consideration , as the case may be :

1. Safety : Positive Standards vs. Probabilities and Reservations
2. New Technology : Biologic Effects collaterally inferred but as yet not specifically determined
3. Biological Effects : Pulsed vs. Continuous Wave (CW) RFR
4. Sutro Tower DTV : RFR Pulse Peak Power Densities
5. Minimize Health Hazards .

1. Safety : Positive Standards vs. Probabilities and Reservations

The introductory paragraph of Chapter 7.0 General Conclusions (page B-71 of Appendix B) ends with the phrase :" Based on present knowledge, human exposure at or below the permissible levels recommended by the IEEE and other organizations ((e.g. adopted by the FCC 96 Guidelines)) is not harmful to human health ."

That is a positive, yet qualified, statement .

Conversely, Chapters 5.0 Unresolved Issues and 7.0 (pages B-69 thru B-72) are fraught with probabilistic qualifiers and reservations :

".... basic uncertainties ...."
".... most unlikely to be deleterious ...."
".... not fully understood...."
".... not possible to guarantee...."
".... controversy remains ...."
".... need for continued research...."
".... not likely to produce health effects...."
".... not demonstrated any likely health hazard ...."

Thus, we have here the juxtaposition of a Federal and organizational Standard, on the one hand, and findings which are often tentative , given with much scientific honesty and prudence - which is commendable - and probably with some legalistic caution, which is understandable .

Therefore , as even the standard is qualified by the recognition of as yet incomplete knowledge , it makes common sense that , if given the choice, the most prudent alternative must be opted for .

2. New Technology : Biologic Effects collaterally inferred but as yet not specifically determined

The following statements, from Appendix B, tend to indicate that the conclusions regarding anticipated biological effects of Sutro Tower DTV pulsed RFR were based on major or minor similarities - but not congruence - with the cause/bio-effects relationships of certain other types of RFR of different power, frequency, modulation, duration of exposure etc. :

a. (page B-8) : ",...DTV signals are distinct from all signal types used in health-related research."

b. (page B-8) : " The various types of radar use a variety of pulse width and repetition pattern. These factors make biological and epidemiological studies of radar exposure least relevant to DTV ."

c. (page B-19): " A few ((epidemiological)) studies directly address populations near radio and TV towers, but none concerns signals from DTV transmitters operating in the range from approximately 500 to 800 MHz. ((as would Sutro Tower DTV)) "

d. (pages B-10/11) : " Neither the type of modulation of the proposed Sutro Tower Digital TV signals .... nor of the existing Sutro Tower TV signals .... matches or closely resembles the type of modulation used in past biological research ((of nonthermal interactions)) with modulated RFR."

These statements lead to the perception that all the research results selected for evaluation in Appendix B - or indeed the entire body of past RFR research results_is only marginally relevant to the objective of predicting the potential biological effects of human exposure to the proposed Sutro Tower DTV pulsed RFR . And, consequently, that this objective still remains to be pursued by direct research with this particular type of radiation .